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Peter T. Barrett

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EXAMINER

STANLEY, MARK P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,251	Applicant(s) BARRETT ET AL.	
	Examiner MARK P. STANLEY	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/25/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 7/11/2008.
2. Claims 1-40 are pending in the application. Claims 17 have been amended.

Response to Arguments

3. Applicant's arguments filed 7/11/2008 with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the schedulers in Horn do not "formulate a send request that designates the client" or "transmit to the first sender a first send request that designates a destination client" or include a "send request means". However, the Examiner respectfully disagrees, Horn states where there may exist multiple administrative servers and request processors, and where administrative servers and request processors may be associated with a particular MOD server ([0066]-[0067]), thus the administrative server, request processor, and associated MOD server may be considered a single device with capabilities of scheduling and requesting a particular media item from a particular storage or stream ([0068]). Horn further teaches that the MOD servers designate specific clients based on client requests to deliver media data ([0071], 'the server may make sure that all packets received on a particular port address are copied and sent to all clients that have sent request message to receive such packets, and thus the server may be an active agent in making the bindings between the logical channel and the physical channels').

Art Unit: 2623

Applicant argues that Horn teaches “media requests emanate from the client device” and further that “the scheduler does not designate client devices”. However, the Examiner respectfully disagrees Horn states where there may exist multiple administrative servers and request processors, and where administrative servers and request processors may be associated with a particular MOD server ([0066]-[0067]), thus the administrative server, request processor, and associated MOD server may be considered a single device with capabilities of scheduling and requesting a particular media item from a particular storage or stream ([0068]). And where requests for media may begin at a client they are further handled and scheduled via the request processors, administrative servers, and associated MOD servers ([0067]). Horn further teaches that the MOD servers designate specific clients based on client requests to deliver media data ([0071], ‘the server may make sure that all packets received on a particular port address are copied and sent to all clients that have sent request message to receive such packets, and thus the server may be an active agent in making the bindings between the logical channel and the physical channels’).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2623

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Horn et al. (US 2002/0107968 A1 hereinafter Horn).

Regarding claim 1, Horn discloses “a system comprising:

a plurality of schedulers including a scheduler that is associated with a client and responsible for servicing a media data stream being sent to the client” ([0065]-[0068], [0074]-[0078], where each item 102 MOD server has items 214 and 216 schedulers for servicing media to item 104 the clients and where item 125 the administrative server also has a scheduler for handling send requests communicating with the MOD servers, where there may be multiple administrative servers and administrative servers may be associated with particular MOD servers and reside on a single device),

“the scheduler adapted to formulate a send request that designates the client as a destination for a media data portion of the media data stream; and” ([0074]-[0078], Figs. 1-2, where requests for item 201 the media blocks or item 205 media streams is handled and encoded as determined by items 214 and 216 the schedulers and then transmitted to the client)

“a plurality of senders including a sender that is associated with media data including the media data portion, the sender adapted to send the media data portion to the client in response to the send request” ([0079], Figs. 1-2, where each item 102 MOD server has item 240 for sending the media across item 108 the network to item 104 the clients).

Regarding claim 2, Horn discloses “the system as recited in claim 1, further comprising:

mass storage of media data;” ([0068], Figs. 1, items 108, 115)

wherein the sender is further adapted to acquire portions of the media data that is associated with the sender from the mass storage of media data” ([0076], [0079], Fig. 2, item 240 acquires item 201 the media from the mass storage and sent as determined by the scheduler).

Regarding claim 3, Horn discloses “the system as recited in claim 1, wherein the scheduler and the sender are functioning on a single device” (Fig. 2, items 214, 216, and 240 are on the same device).

Regarding claim 4, Horn discloses “the system as recited in claim 1, wherein the scheduler is functioning on a first device, and the sender is functioning on a second device” ([0077], item 125 the administrative server has the ability to perform the operations of the schedulers on each MOD server when communicating with the MOD server which contains item 240 for sending the data, where the administrative server is the first device, and the MOD server is the second device).

Regarding claim 5, Horn discloses “the system as recited in claim 4, further comprising:

a switch that is coupled to the second device and to the client via a network;” ([0065], [0071])

“wherein the sender is further adapted to send the media data portion to the client via the switch over the network without routing the media data portion through the first device” (Fig. 1, where item 125 the first device communicates with item 102 the second device, items 108 and 115 the media data are not routed through the first device but straight through item 102 the second device).

Regarding claim 6, Horn discloses “the system as recited in claim 4, further comprising:

a first switch that is coupled to the second device and to the client; and

a second switch that is coupled to the first device;

wherein the sender is further adapted to send the media data portion to the client via the first switch, and the scheduler is further adapted to transmit the send request to the sender via the second switch” ([0065], [0071]).

Regarding claim 7, Horn discloses “the system as recited in claim 4, wherein another scheduler is functioning on the second device, and another sender is functioning on the first device; and wherein the other scheduler is

Art Unit: 2623

associated with another client, and the other sender is associated with other media data" ([0074], each sender of each MOD server has the ability serve a separate portion or entire different block of media data to the same or different clients).

Regarding claim 8, Horn discloses "the system as recited in claim 1, wherein the media data stream corresponds to a media data segment that is stored by the system, and wherein the sender is functioning on a first device;" ([0074], Fig. 1, where each MOD server has a sender)

"wherein the plurality of senders further include another sender that is functioning on a second device, the other sender associated with other media data including another media data portion; and" ([0074], each MOD server has the ability serve a separate portion of the media data, where the number of MOD servers varies, 102(1) would be the first device and 102(2) would be the second device)

"wherein the media data portion and the other media data portion are both parts of the media data segment" ([0074]).

Regarding claim 9, Horn discloses "the system as recited in claim 8, wherein the scheduler is further adapted to formulate another send request that designates the client as a destination for the other media data portion of the media data stream; and

wherein the other sender is further adapted to send the other media data portion to the client in response to the other send request” ([0074]-[0075], where multiple servers have the ability for sending the same or other portions if a current server is unable to do so).

Regarding claim 10, Horn discloses “the system as recited in claim 1, further comprising:”

“a plurality of devices;” ([0074], Fig. 1, item 102 the MOD servers)

“wherein respective senders of the plurality of senders are functioning on respective devices of the plurality of devices, and respective devices are storing respective media data portions to which respective senders are respectively associated and adapted to send to clients” ([0074], Fig. 1, each MOD server has a sender, where the media data must be stored on the server at some point for encoding before the sender can transmit the media data to the client).

Regarding claim 11, Horn discloses “a system comprising:

a first device having a first sender that is adapted to store a first media data block of a media data segment and to send the first media data block to clients responsive to send requests;” ([0074], Fig. 1, each MOD server has a sender, where the media data must be stored on the server at some point for encoding before the sender can transmit the media data to the client)

Art Unit: 2623

“a second device having a second sender that is adapted to store a second media data block of the media data segment and to send the second media data block to clients responsive to send requests; and” ([0074]-[0075], where multiple MOD servers have the ability for sending the same or other portions of the media data)

“a scheduler that is adapted to transmit to the first sender a first send request that designates a destination client and stipulates the first media data block and to transmit to the second sender a second send request that designates the destination client and stipulates the second media data block” ([0074], [0077], item 125 the administrative server has the ability to perform the operations of the schedulers on each MOD server when communicating with the MOD servers which contains item 240 for sending the data).

Regarding claim 12, Horn discloses “The system as recited in claim 11, wherein the first media data block is stored at the first device in random access memory (RAM) thereof, and the second media data block is stored at the second device in RAM thereof” ([0074], Fig. 1).

Regarding claim 13, Horn discloses “the system as recited in claim 11, wherein the scheduler is functioning on at least one of the first device, the second device, or a third device” ([0074], [0077], Fig. 1, item 125 where the scheduler is functioning on the administrative server, a third device).

Regarding claim 14, Horn discloses “the system as recited in claim 11, wherein the first sender is further adapted to send the first media data block to the destination client without directing the first media data block through a device on which the scheduler is functioning” (Fig. 1, where item 125 the first device communicates with item 102 the second device, items 108 and 115 the media data are not routed through the first device but straight through item 102 the second device).

Regarding claim 15, Horn discloses “the system as recited in claim 11, wherein the first sender is further adapted to send the first media data block to the destination client with a packet having a destination address comprising a network address of the destination client” ([0065], [0071]).

Regarding claim 16, Horn discloses “the system as recited in claim 11, further comprising:

another scheduler that is adapted to transmit to the first sender a third send request that designates another destination client and stipulates the first media data block and to transmit to the second sender a fourth send request that designates the other destination client and stipulates the second media data block” ([0067], [0074], [0077], where the number of administrative servers is not limited to one, where a administrative server will contain a scheduler for handling the sending of media data in portions where each MOD server handles the sending of a different portion).

Regarding claim 17, Horn discloses “one or more processor-accessible media comprising processor-executable instructions that, when executed, direct a system to perform actions comprising:

transmitting a send request from a first device to a second device, the send request designating a destination client and stipulating a media data portion; and” ([0066]-[0067]),

“sending from the second device to the destination client the stipulated media data portion in response to the send request, wherein the first device is not the destination client” ([0067]-[0068]).

Regarding claim 18, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform further actions comprising:

transmitting another send request from the first device to the second device, the other send request designating the destination client and stipulating another media data portion; and

sending from the second device to the destination client the other stipulated media data portion in response to the other send request” ([0066]-[0071]).

Regarding claim 19, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform further actions comprising:

transmitting another send request from the first device to a third device, the other send request designating the destination client and stipulating another media data portion; and

sending from the third device to the destination client the other stipulated media data portion in response to the other send request” ([0066]-[0071]).

Regarding claim 20, Horn discloses “the one or more processor-accessible media as recited in claim 19, comprising the processor-executable instructions wherein the stipulated media data portion and the other stipulated media data portion are both part of a single media data segment” ([0056]-[0057]).

Regarding claim 21, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform further actions comprising:

transmitting another send request from a third device to the second device, the other send request designating another destination client and stipulating the media data portion; and

sending from the second device to the other destination client the stipulated media data portion in response to the other send request” ([0066]-[0071]).

Regarding claim 22, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform further actions comprising:

transmitting another send request from a third device to a fourth device, the other send request designating another destination client and stipulating another media data portion; and

sending from the fourth device to the other destination client the other stipulated media data portion in response to the other send request” ([0066]-[0071]).

Regarding claim 23, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform a further action comprising:

receiving a command at the first device from the destination client to begin streaming a media data asset, the media data asset including the media data portion” ([0069]-[0071]).

Regarding claim 24, Horn discloses “the one or more processor-accessible media as recited in claim 23, comprising the processor-executable instructions that, when executed, direct the system to perform a further action comprising:

scheduling, at the first device responsive to the received command, media data portions for sending to the destination client” ([0066], [0071]).

Regarding claim 25, Horn discloses “the one or more processor-accessible media as recited in claim 24, comprising the processor-executable instructions that, when executed, direct the system to perform a further action comprising:

transmitting from the first device respective send requests of a plurality of send requests to respective devices of a plurality of devices, each respective device storing a respective media data portion of a plurality of media data portions that form at least part of the media data asset” ([0066]-[0067]).

Regarding claim 26, Horn discloses “the one or more processor-accessible media as recited in claim 17, wherein the action of transmitting a send request comprises an action of:

transmitting the send request from a scheduler functioning on the first device, the scheduler associated with the designated destination device and responsible for servicing media data requests received at the system from the designated destination device” ([0066]-[0071]).

Regarding claim 27, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions that, when executed, direct the system to perform a further action comprising:

receiving the send request at a sender on the second device, the sender associated with the stipulated media data portion and responsible for caching the stipulated media data portion at the second device in random access memory (RAM) thereof and for sending the stipulated media data portion to clients responsive to send requests directed thereto” ([0074], Fig. 1).

Regarding claim 28, Horn discloses “the one or more processor-accessible media as recited in claim 17, comprising the processor-executable instructions wherein the stipulated media data portion comprises one or more media data sub-blocks of a media data block of a media data segment, the media data block cached in random access memory (RAM) at the second device” ([0074], Fig. 1).

Regarding claim 29, Horn discloses “the one or more processor-accessible media as recited in claim 17, wherein the one or more processor-accessible media comprise at least one of (i) one or more storage media and (ii) one or more transmission media” ([0068]).

Regarding claim 30, Horn discloses “an arrangement for architecting distributed sending of media data, the arrangement comprising:

scheduler means for scheduling media data to be sent to multiple clients with which the scheduler means is associated, the scheduler means including send request means for requesting the sending of the media data to the multiple clients; and” ([0066]-[0067], [0074], [0077], item 125 the administrative server has the ability to perform the operations of the schedulers on each MOD server when communicating with the MOD servers which contains item 240 for sending the data, and there may exist multiple administrative servers which may reside on the same device of particular MOD servers).

sender means for sending media data portions to clients as scheduled by the scheduler means, the sender means including cache means for caching a distributed part of the media data as the media data portions, wherein the sender means sends the media data portions from the distributed part of the media data in response to send requests received from the send request means ([0074]-[0075], where multiple MOD servers have sending means for the same or other portions of the media data)

Regarding claim 31, Horn discloses “the arrangement as recited in claim 30, further comprising:

a plurality of respective sender means for sending respective media data portions to clients as scheduled by the scheduler means, the plurality of respective sender means including a plurality of respective cache means for

Art Unit: 2623

caching respective distributed parts of the media data as their respective media data portions, wherein respective sender means of the plurality of respective sender means send their respective media data portions from their respective distributed parts of the media data in response to respective send requests received from the send request means” ([0067], [0074]).

Regarding claim 32, Horn discloses “the arrangement as recited in claim 31, wherein a respective media data portion from each of the respective media data portions of each respective sender means of the plurality of sender means is sent to an individual client to form at least part of a media data asset”

Regarding claim 33, Horn discloses “the arrangement as recited in claim 30, further comprising:

a plurality of respective scheduler means for scheduling the media data to be sent to respective multiple clients with which each of the respective scheduler means is respectively associated, each respective scheduler means of the plurality of respective scheduler means including a respective send request means of a plurality of respective send request means for requesting from the sender means the sending of the media data to each of their respective multiple clients” ([0066]-[0067], [0074]).

Regarding claim 34, Horn discloses “the arrangement as recited in claim 30, wherein the arrangement comprises at least one of (i) one or more processor-accessible media and (ii) at least one device” ([0068]).

Regarding claim 35, Horn discloses “the arrangement as recited in claim 30, wherein the send request means comprises means for formulating send requests wherein each send request includes a designated destination client of the multiple clients and a stipulated media data portion of the media data portions of the sender means to which a given send request is directed” ([0065]-[0071]).

Regarding claim 36, Horn discloses “one or more processor-accessible media comprising processor-executable instructions that, when executed, cause a system to:

 distribute respective media data blocks of a media data segment over respective devices of a plurality of devices;” ([0074], Fig. 1, each MOD server has a sender)

 “create respective senders on the respective devices of the plurality of devices, each respective sender capable of sending a respective media data block of the media data blocks; and” ([0074]-[0075], where multiple MOD servers have the ability for sending the same or other portions of the media data)

 “create a scheduler on at least one device of the plurality of devices, the scheduler adapted to request the sending of the respective media data blocks from the respective senders to a destination client; wherein the respective

Art Unit: 2623

senders are capable of sending the respective media data blocks to the destination client without using the scheduler” ([0066], [0074], [0077], item 125 the administrative server has the ability to perform the operations of the schedulers on each MOD server when communicating with the associated MOD servers which contains item 240 for sending the data, and an administrative server and request processor may reside on the same device of the associated MOD server).

Regarding claim 37, Horn discloses “the one or more processor-accessible media as recited in claim 36, comprising the processor-executable instructions wherein the respective senders are further capable of sending the respective media data blocks to the destination client without using the at least one device of the scheduler” ([0066]-[0067], [0074]).

Regarding claim 38, Horn discloses “the one or more processor-accessible media as recited in claim 36, comprising the processor-executable instructions that, when executed, cause the system to create multiple schedulers with at least one scheduler of the multiple schedulers present on multiple devices of the plurality of devices; and wherein each scheduler of the multiple schedulers is adapted to request the sending of the respective media data blocks from the respective senders to differing destination clients” ([0065]-[0068], [0074]-[0078]).

Regarding claim 39, Horn discloses “the one or more processor-accessible media as recited in claim 38, comprising the processor-executable instructions wherein the respective senders are further capable of sending the respective media data blocks to the differing destination clients responsive to send requests received from each scheduler of the multiple schedulers” ([0066]-[0071], [0074]).

Regarding claim 40, Horn discloses “the one or more processor-accessible media as recited in claim 36, comprising the processor-executable instructions that, when executed, cause the system to distribute respective media data blocks of another media data segment over respective devices of the plurality of devices; wherein each respective sender is further capable of sending a respective media data block of the media data blocks of the other media data segment, and the scheduler is adapted to request the sending of the respective media data blocks of the other media data segment from the respective senders to another destination client” ([0066]-[0071], [0074]).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK P. STANLEY whose telephone number is (571)270-3757. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark P Stanley/
Examiner, Art Unit 2623

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2623